

REMARKS

The Office action of 25 August 2005 (Paper No. 0705-2005) has been carefully considered.

The specification is being amended to improve its form. Claims 1, 5, 8, 11, 15 and 18 are being amended. Thus, claims 1 thru 20 are pending in the application.

In paragraph 1 of the Office action, the Examiner objected to the specification for lack of proper antecedent basis for the claimed subject matter. Specifically, the Examiner alleged that the specification does not disclose an amplifier which is connected to an output terminal of the peak detector 241b of Figure 2 of the application, as recited in claims 7 and 17. Applicant respectfully disagrees with the Examiner's assertion.

In the latter regard, the Examiner is referred to paragraph [0032] on page 8 of the specification. Therein, it is stated that, in the embodiment of the present invention, the amplifier 241a is installed at the input stage of the peak detector 241b. However, the paragraph further states that there may be a case in which the amplifier 241a is installed at the output stage of the peak detector 241b, and that, in such a case where the gain of the pre-amplifier 230 is sufficiently large, the amplifier 241a may then be removed from the input stage of the peak detector 241b.

Thus, the specification does disclose (in paragraph [0032]) an arrangement wherein the amplifier 241a is connected to the output stage of the peak detector 241b rather than to the input of the peak detector 241b. It is respectfully submitted that this constitutes provision, in the specification, of “clear support or antecedent basis” for the recitation, in claims 7 and 17, of the case wherein the amplifier is connected to an output terminal of the peak detector 241b of Figure 2 of the application. Thus, the provisions of 37 C.F.R. §1.75(d)(1) and of the MPEP §608.01(o) have been complied with. On that basis, it is respectfully submitted that the objection to the specification does not apply, and should be withdrawn.

In paragraph 3 of the Office action, the Examiner rejected claims 1, 2, 4 thru 7, 10 thru 12, 14 thru 17 and 20 under 35 U.S.C. §103 for alleged unpatentability over Jeong, U.S. Patent No. 5,218,489. In paragraph 4 of the Office action, the Examiner rejected claims 1 thru 3 and 11 thru 13 under 35 U.S.C. §103 for alleged unpatentability over Han, U.S. Patent No. 5,541,780. In paragraph 5 of the Office action, the Examiner objected to claims 8, 10, 18 and 19, but stated that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. For the reasons stated below, it is submitted that the invention recited in the claims, as now amended, is distinguishable from the prior art cited by the Examiner so as to preclude rejection under 35 U.S.C. §103.

Independent claim 1 is being amended to recite the method in terms of three steps, that is, the step of providing the video signal processing IC with an envelope detector, the step of providing the video signal processing IC with a level variation switching circuit, and the step of connecting an input of the level variation switching circuit to a control output of a microprocessor so that ON/OFF switching control of the level variation switching circuit is executed in response to a control data input from the microprocessor.

In rejecting claim 1 under 35 U.S.C. §103 based on the disclosure of Jeong '489, the Examiner alleged that Jeong '489 discloses an envelope detector 200, and a level variation switching circuit in the form of comparator 300 and second amplifier 450 of Figures 2 and 3 of the patent. The Examiner then alleged that ON/OFF switching control of the level variation switching circuit (comparator 300 and amplifier 450) is executed in response to a control data input from a microprocessor (the Examiner citing switch SW1 and microcomputer 400 of Jeong '489).

However, it should be noted that, in Jeong '489, the switch SW1 is a user-operated switch which receives no control data input from the microcomputer 400. In fact, as disclosed at column 2, line 67-column 3, line 6 of Jeong '489, the switch SW1 is operated by the user to select either the manual tracking mode or the automatic tracking mode. When the manual tracking mode is selected by the user, the servo terminal 500 is connected via the variable resistor 3R to the power terminal V_{CC} , whereas when the

automatic tracking mode is selected, the servo terminal 500 is connected to the microcomputer 400. Thus, the switch SW1 does not perform any ON/OFF switching control of a level variation switching circuit (comparator 300 and amplifier 450), and the switch SW1 is not operated in response to a control data input from the microcomputer 400. Rather, the user operates the switch SW1 to choose the manual tracking mode, in which case the servo terminal 500 is connected to the power terminal V_{CC} via the variable resistor R3, or alternatively the user employs the switch SW1 to select the automatic tracking mode, in which case the servo terminal 500 is connected to the microcomputer 400.

For the above reasons, it is submitted that the inventive method as recited in independent claim 1 and its associated dependent claims is distinguishable from Jeong '489 so as to preclude the rejection under 35 U.S.C. §103.

In paragraph 4 of the Office action, the Examiner also rejected independent claim 1 under 35 U.S.C. §103 based on the disclosure of Han '780. In that regard, the Examiner alleged that Han '780 disclosed (in Figure 7) an envelope detector, the Examiner citing the output ENV.COMP of preamplifier 20 of Figure 7, as provided to the microprocessor 30 of Han '780. The Examiner further alleged that this constitutes the disclosure of the detection of an envelope of an FM video signal, the Examiner citing column 2, lines 26-37 and column 7, lines 47-56 of the patent.

However, the portions of the text of Han '780 cited by the Examiner do not at all disclose any function of detection and output of an envelope of an FM video signal. In fact, at column 8, lines 1-14 of Han '780, it is disclosed that the microprocessor 30 receives from the preamplifier 20 an envelope comparison signal ENV.COMP "generated by an envelope comparator that is not explicitly shown in FIG. 7, but corresponds to the envelope comparator 27 of FIG. 2" (quoting from column 8, lines 3-5 of Han '780).

In the latter regard, a description of the function of the envelope comparator 27 of Figure 2 of Han '780 appears at column 3, lines 5-21 of the patent. Therein, it is disclosed that, in the envelope comparator 27, a comparison is made between the SP-head signal and LP+ head signal or between the SP+ head signal and the LP- head signal according to a selection made by the first and second head selecting switches 25 and 26 (*see* column 3, lines 5-9 of Han '780). It is further disclosed that, whereas the envelope comparator 27 includes envelope detectors for each of its input signals, the envelope comparison signal is a logic "high" level when the LP head signal is larger than the SP head signal, or the envelope comparison signal is a logic "low" level when the LP head signal is smaller than the SP head signal (*see* column 3, lines 13-19 of Han '780). Thus, the envelope comparator disclosed in Han '780 does not produce, as an output, the envelope of an FM video signal. Rather, the envelope comparator 27 of Han '780 produces either a logic "high" level signal or a logic "low" level signal depending on the

relative magnitude of the LP head signal and the SP head signal.

Thus, when the Examiner asserts that the microprocessor 30 of Han '780 (Figure 7) corresponds to the recited level variation switching circuit for changing the envelope level of the FM video signal, the assertion is erroneous because the preamplifier 20 (or the envelope detector 27 contained therein) does not provide to the microprocessor 30 the envelope of the detected FM video signal, but rather provides one of two control outputs corresponding to the relative magnitude between the SP head signal and the LP head signal.

In paragraph 4 of the Office action, the Examiner further asserts that the recited ON/OFF switching control of the present invention corresponds to the operation of the switching controller 90 and the video out 80 of Figure 7 of Han '780. However, a review of Han '780 (and, in particular, column 5, lines 22-35 thereof) reveals that the switch 80 does not perform ON/OFF switching control of the level variation switching circuit (the microprocessor 30 in the Examiner's analogy), but rather the switch 80 selects either the original video signal from video reproducer 40 or a delayed video signal from the delay line 70 depending on whether a "high" level of skew jump indication signal or a "low" level of skew jump indication signal is received by the switch 80 from the microprocessor 30.

For the above reasons, it is submitted that the invention recited in claim 1 is distinguishable from the disclosure of Han '780 so as to preclude rejection under 35 U.S.C. §103.

In paragraph 3 of the Office action, the Examiner rejected claim 5 under 35 U.S.C. §103 based on Jeong '489. The Examiner alleged that Jeong '489 disclosed the claimed peak detector, citing the waveform shaper 230 of Figure 3 of the patent. The Examiner cited column 2, lines 47-53 and column 3, lines 27-34 of Jeong '489. However, the first citation merely discloses the component elements (resistors, capacitors and a diode) of the waveform shaper 230, whereas the second citation merely discusses supply of an envelope waveform to a first amplifier 210, and supply of the FM signal to a coupling capacitor for amplification by a transistor, followed by increase of the amplification by bandpass filter. There is no disclosure or suggestion of a peak detector for detecting a peak value of an FM video signal, as recited in the claim.

Furthermore, the Examiner alleges that the recited level switch is disclosed in the form of second amplifier 450 and comparator 300, and the Examiner alleges that, in this arrangement of Jeong '489, the envelope level of the FM video signal is controlled according to mode information applied from a microprocessor. However, in Figures 2 and 3 of Jeong '489, the output of the microcomputer 400 is connected to an amplifier 450 in order to supply a head switching pulse HSP to the amplifier 450, in response to

which the amplifier 450 generates a pulse train and provides it to one of the inputs of a comparator 300 (*see* column 3, lines 26-38 of Jeong '489). Thus, there is no disclosure or suggestion in Jeong '489 of the provision, by the microcomputer 400, of mode information relative to the type of mode of operation of a video cassette recorder (VCR) as recited in independent claim 5.

For the above reasons, it is submitted that the invention recited in independent claim 5 and its associated dependent claims is distinguishable from the prior art so as to preclude rejection under 35 U.S.C. §103.

In paragraph 3 of the Office action, the Examiner rejects independent claim 11 under 35 U.S.C. §103 based on Jeong '489, and in paragraph 4 of the Office action, the Examiner rejects independent claim 11 under 35 U.S.C. §103 based on Han '780. On pages 6 and 7 of the Office action, the Examiner states that claim 11 is rejected for the same reasons as described relative to the rejection of claim 1 under 35 U.S.C. §103 based on both Jeong '489 and Han '780. Thus, for the same reasons as stated above relative to independent claim 1, the invention recited in independent claim 11 is distinguishable from Jeong '489 and/or Han '780 so as to preclude rejection under 35 U.S.C. §103.

In paragraph 3 of the Office action, the Examiner rejects independent claim 15 under 35 U.S.C. §103 based on Jeong '489. On page 6 of the Office action, the Examiner

states that claim 15 is rejected for the same reasons as described relative to the rejection of claim 5. Thus, for the same reasons as stated above relative to independent claim 5, the invention recited in independent claim 15 is distinguishable from Jeong '489 so as to preclude rejection under 35 U.S.C. §103.

Finally, in paragraph 5 of the Office action, the Examiner indicated that dependent claims 8 and 18 were merely objected to for dependency upon a rejected base claim, but would be allowable if rewritten in independent form. Accordingly, dependent claims 8 and 18 are being amended to appear in independent form, and thus immediate allowance of these claims should now be forthcoming.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

A fee of \$400.00 is incurred by the addition of two (2) independent claims in excess of 4. Applicant's check drawn to the order of Commissioner accompanies this Amendment. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



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